

Fig 1A

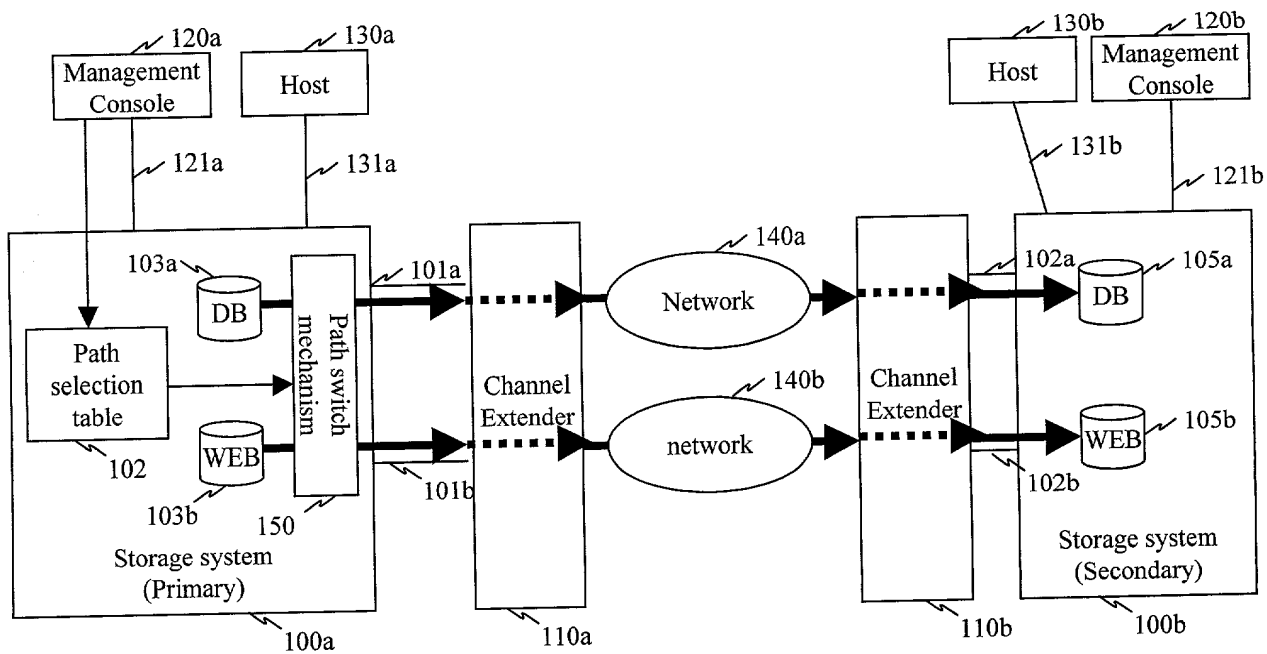


Fig 1B

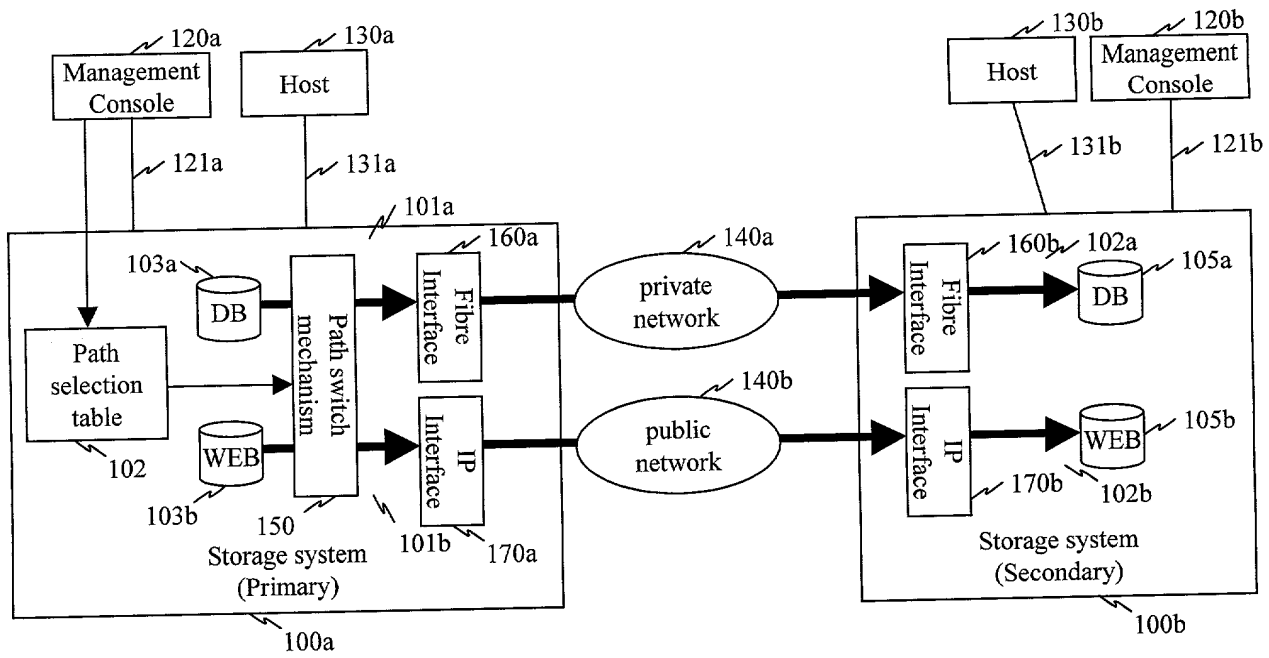


Fig 2

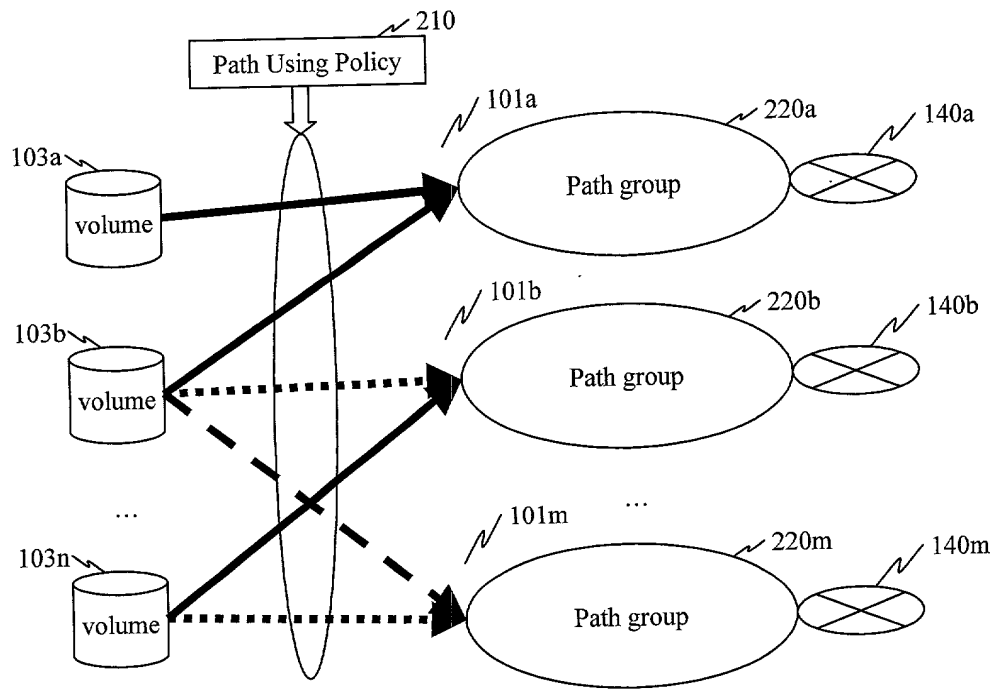


Fig 3 path selection table 300

310 Volume number	320a Path group number	320b Path group number
0	0	NULL
1	1	0
2	0	NULL
3	1	NULL
4	1	0

Fig 4 path group table 400

410 Path group number	420 Constraint	440 Status	430a Remote link number	430b Remote link number	430c Remote link number
0	Max 5MB/s	Unavailable	0	1	NULL
1	9:00pm to 6:00am only	Available	2	3	4
2	Busy rate less than 70%	Available	5	6	NULL
3	Error rate less than 5%	Temporally Unavailable	7	8	NULL
4	Outboard control	Temporally Unavailable	9	10	11

Fig 5 path selecting algorithm

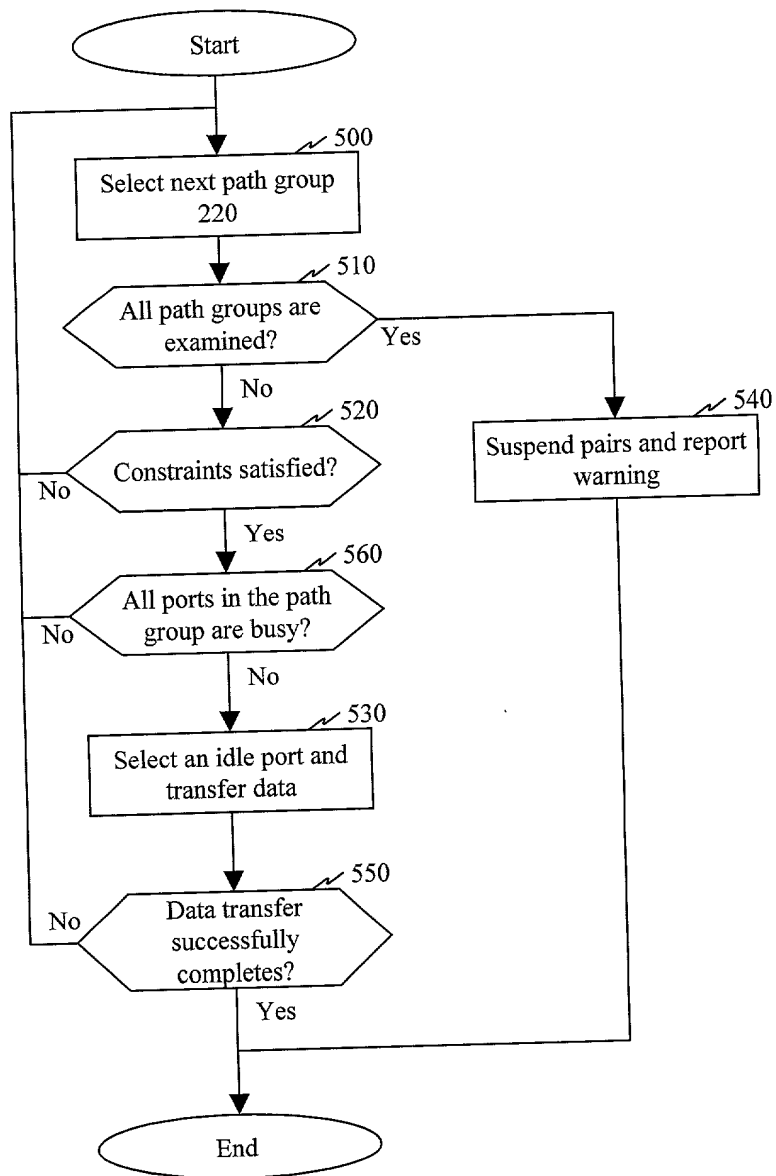


Fig 6 User interface for setting path constraints

610

612 Juno - SUN Ultra60

614 /dev/rdisk/c1t1d0

616 /dev/rdisk/c1t2d0

616 Mars - SUN Ultra450

616 Jupiter - SUN Ultra450

620

630

640

Storage System Information

Manufacturer: HITACHI

Product: HDS9900

Serial: 0x00421014

Location: Head quarter (SF)

Device Information

Device Type: OPEN-3

Size: 24420 MB

650

Remote Copy Information

Pair Status: PAIR 651

Remote Storage System Information

Serial: 0x00421025 652

Location: Development Ce... 653

Remote Link Information

Path Group: 654

T3 up to 5MB/s	RDY
Internet	RDY
Extranet	N/A

Change Path Group Name: 655

T3 up to 5MB/s

Status: 656

Available

Constraints: 657

✓ TP up to 5MB/s

660 Apply

670 Close

600

Fig 7 Maximum throughput dialog

700

Maximum throughput constraints

Selected Path Group: T3 up to 5MB/s

Target Server - Device: Juno - /dev/rdisk/c1t2d0 710

Maximum Throughput: MB/s 720

Alarm Options:

E-mail Address: 730

Phone Number: 740

750 760 770

Fig 8 Flow chart for using expensive networks below maximum throughput or busy rate

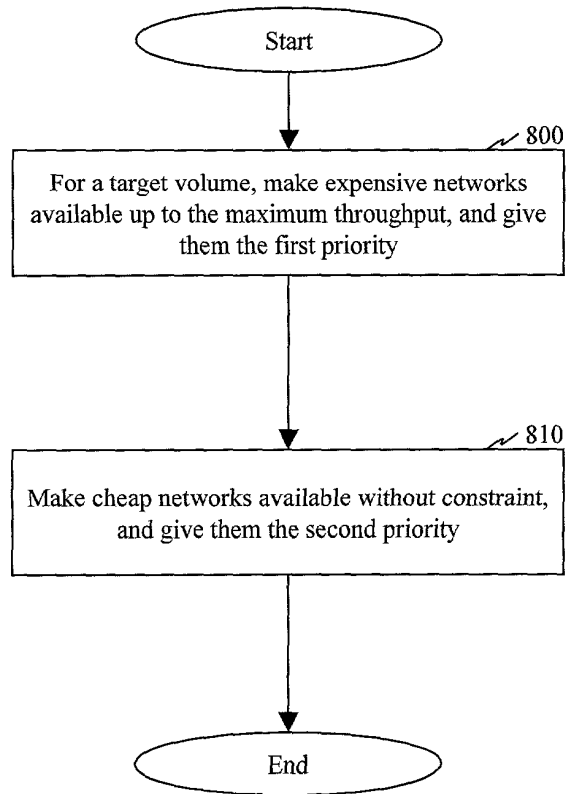


Fig 9 Flow chart for using cheap networks only daytime

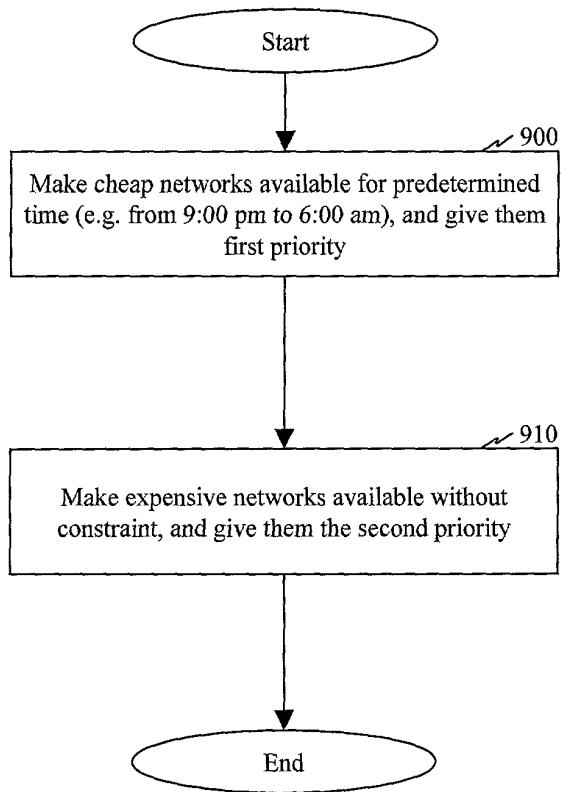


Fig 10 System Configuration with Network Monitor

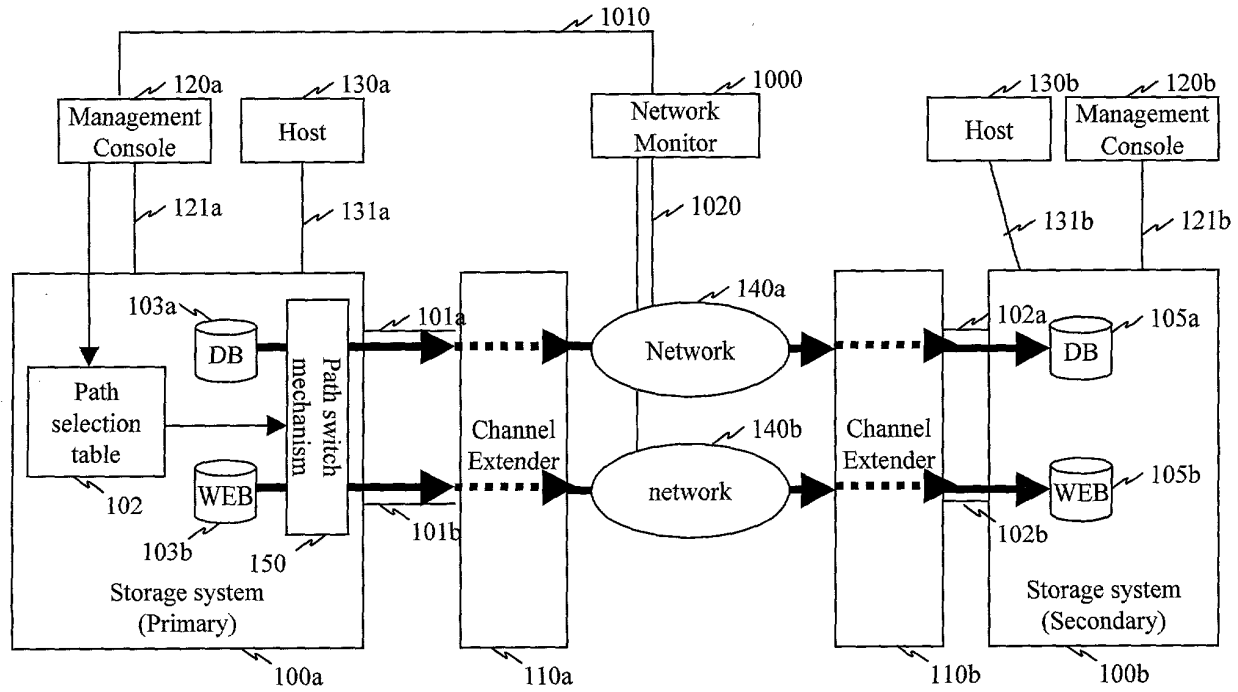


Fig 11 Information sending from Network Monitor to Management Console

Network Name	Internet	1100
Warning	Overload (80% busy rate)	1110
Current Date and Time	12-12-2000:13:46	1120

Fig 12 Flowchart for monitoring networks

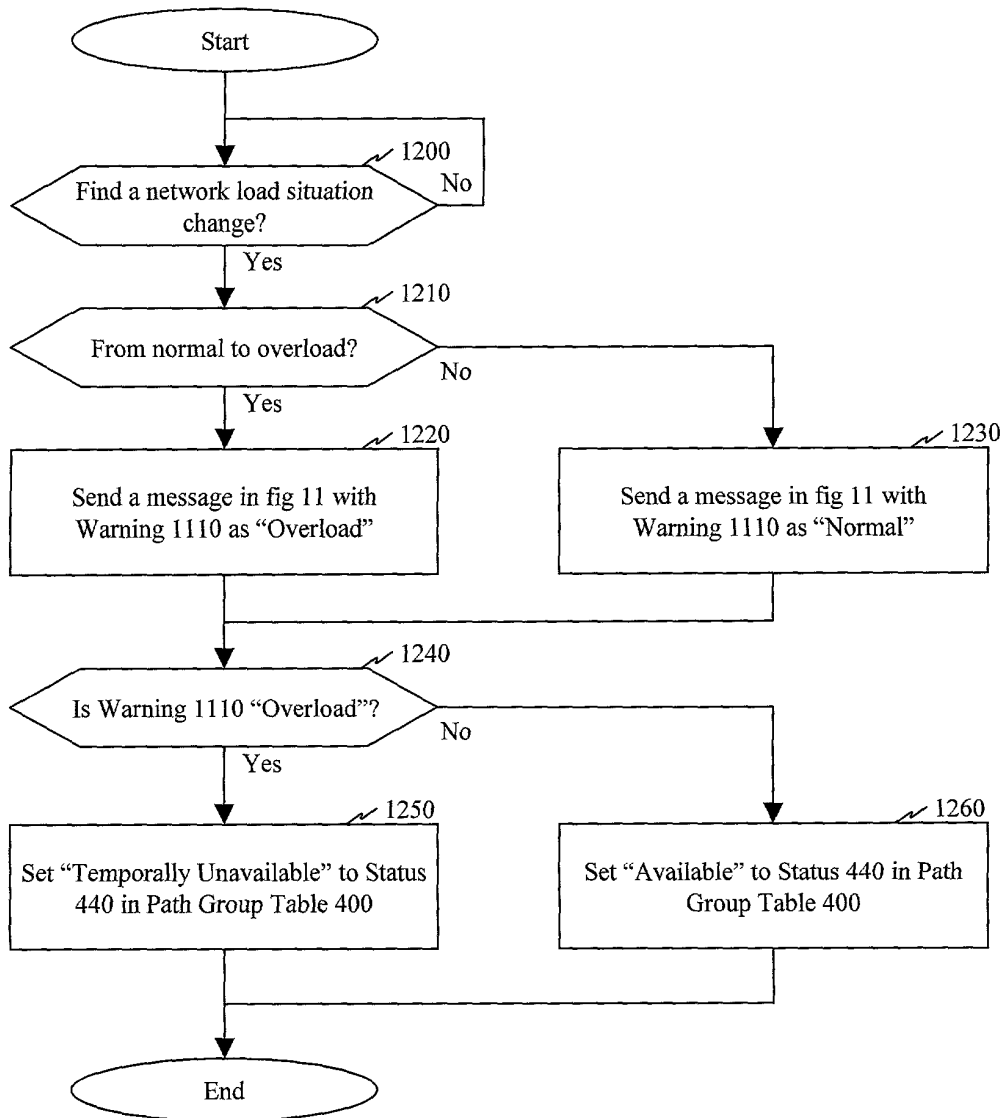


Fig 13 Flow chart for using expensive network only in emergency

